

CLAIMS

What is claimed is:

1. A system for initializing a data processing system, comprising:
 - a plurality of parameter registers;
 - a user-defined initialization input defining a first set of initialization data utilized for initializing said data processing system;
 - a serial non-volatile memory, coupled to said plurality of parameter registers, said serial non-volatile memory utilized for storing a second set of initialization data utilized for initializing said data processing system;
 - a parallel non-volatile memory, coupled to said plurality of parameter registers, said parallel non-volatile memory utilized for storing a third set of initialization data utilized for initializing said data processing system; and
 - a multiplexor interposed between said parameter registers and said user-defined initialization input, said serial non-volatile memory, and said parallel non-volatile memory for determining a selection from said user-defined initialization input, said serial non-volatile memory, and said parallel non-volatile memory and relaying said selection to said plurality of parameter registers, in response to a control signal.
2. The system for initializing a data processing system according to claim 1, further including a set of control resistors coupled to a user-defined control input, wherein said set of control resistors outputs said control signal in response to said user-defined control input.

1 3. The system for initializing a data processing system according to claim 1, further
2 including a set of initialization resistors coupled to a user-defined initialization input,
3 wherein said set of initialization resistors outputs an initialization signal, in response to
4 said user-defined initialization input.

1 4. The system for initializing a data processing system according to claim 1, further
2 including a command decoder is interposed between said multiplexor and said processor
3 and said parallel non-volatile memory, said command decoder is utilized for filtering
4 commands issued from said processor for a set of desired commands.

1 5. The system for initializing a data processing system according to claim 1, further
2 including a serial non-volatile memory controller is interposed between said serial non-
3 volatile memory and said multiplexor, said serial non-volatile memory controller is
4 utilized for controlling data sent from serial non-volatile memory.

1 6. The system for initializing a data processing system according to claim 1, further
2 including a parallel non-volatile memory controller is interposed between said parallel
3 non-volatile memory and said command decoder, said parallel non-volatile memory
4 controller is utilized for controlling data sent from parallel non-volatile memory.

1 7. A data processing system, comprising:

2 a processor;

3 a memory, coupled to said processor; and

4 a system for initializing a data processing system, comprising:

5 a plurality of parameter registers;

6 a user-defined initialization input defining a first set of initialization data
7 utilized for initializing said data processing system;

8 a serial non-volatile memory, coupled to said plurality of parameter
9 registers, said serial non-volatile memory utilized for storing a second set of
10 initialization data utilized for initializing said data processing system;

11 a parallel non-volatile memory, coupled to said plurality of parameter
12 registers, said parallel non-volatile memory utilized for storing a third set of
13 initialization data utilized for initializing said data processing system; and

14 a multiplexor interposed between said parameter registers and said user-
15 defined initialization input, said serial non-volatile memory, and said parallel
16 non-volatile memory for determining a selection from said user-defined
17 initialization input, said serial non-volatile memory, and said parallel non-volatile
18 memory and relaying said selection to said plurality of parameter registers, in
19 response to a control signal.

1 8. A host data processing system, comprising:

2 an integrated circuit in which a data processing system in accordance with claim
3 7 is fabricated;

4 an interconnect coupled to said integrated circuit;

5 a host processor; and

6 a host memory.

7 9. A method of initializing a data processing system, comprising:

8 sending a control signal to a multiplexor, said control signal designating one of
9 a plurality of sets of initialization data as a preferred set of initialization data;

10 relaying said preferred set of initialization data to a plurality of parameter
11 registers; and

12 utilizing said preferred set of initialization data stored in said plurality of
13 parameter registers to initialize said data processing system.

14 10. The method of initializing a data processing system according to claim 9, further
15 including:

16 generating a signal, by a user, from a user-defined control input to send said
17 control signal to said multiplexor.

1 11. The method of initializing a data processing system according to claim 9, further
2 including:

3 filtering commands by a command decoder, said commands issued from a
4 processor, in response to designating a set of initialization data stored in a parallel non-
5 volatile memory as said preferred set of initialization data.

1 12. The method of initializing a data processing system according to claim 9, further
2 including:

3 designating a initialization signal sent from a n initialization input as said
4 preferred set of initialization data, in response to selecting a first option by said control
5 signal.

1 13. The method of initializing a data processing system according to claim 9, further
2 including:

3 designating a set of initialization data stored in a serial non-volatile memory as
4 said preferred set of initialization data, in response to selecting a second option by said
5 control signal.

1 14. The method of initializing a data processing system according to claim 9, further
2 including:

3 designating a set of initialization data stored in a parallel non-volatile memory as
4 said preferred set of initialization data, in response to selecting a third option by said
5 control signal.